

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-5 (Canceled).

Claim 6. (Original) An image processing system comprising:

a dividing unit dividing image data into a plurality of  $n \times m$  pixel matrix block data, where  $n$  and  $m$  are integers;

a transform unit transforming each pixel in the  $n \times m$  pixel matrix block data by a frequency transform method so as to produce a transform factor including a high-frequency component and a low-frequency component;

an image area discriminating unit for determining whether the block being processed corresponds to an edge area or a non-edge area based on the transform factor output from said transform unit;

a quantizing unit quantizing the transform factor for the edge area and the transform factor for the non-edge area by different methods; and

an encoding unit encoding an output of said quantizing unit by an entropy encoding method,

wherein a total of a number of bits of the high-frequency component and a number of bits of the low-frequency is the same regardless of types of the edge area or the non-edge area, and a number of bits of the high-frequency component for the edge area is the same as a number of bits of the low-frequency component of the non-edge area.

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Claim 7. (Original) The image processing system as claimed in claim 6, wherein said encoding unit encodes error data generated by said quantizing unit.

Claim 8. (Original) The image processing system as claimed in claim 6, wherein an encoding of the image for the edge, area is performed by using, only the high-frequency component, and an encoding of the image for the non-edge area is performed by using only the low-frequency component.

Claim 9. (Original) The image processing system as claimed in claim 6, wherein every other block data is used for restoring an original image.

Claim 10. (Original) An image processing method comprising the steps of:  
dividing image data into a plurality of  $n \times m$  pixel matrix block data, where  $n$  and  $m$  are integers;  
transforming each pixel in the  $n \times m$  pixel matrix block data by a frequency transform method so as to produce a transform factor including a high-frequency component and a low-frequency component;  
determining whether the block being processed corresponds to an edge area or a non-edge area based on the transform factor output from said transform unit;

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quantizing the transform factor for the edge area and the transform factor for the non-edge area by different methods; and

encoding an output of said quantizing unit by an entropy encoding method,

wherein a total of a number of bits of the high-frequency component and a number of bits of the low-frequency is the same regardless of types of the edge area or the non-edge area, and a number of bits of the high-frequency component for the edge area is the same as a number of bits of the low-frequency component of the non-edge area.